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PATENT  
Attorney Docket No.: 018563-001130US  
Client Reference: AT-00014.2

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

On 4/27/05

TOWNSEND and TOWNSEND and CREW LLP

By: [Signature]  
Tiffany Wu

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

LOC X. PHAN et al.

Application No.: 10/632,482

Filed: August 1, 2003

For: ATTACHMENT DEVICES AND  
METHODS FOR A DENTAL  
APPLIANCE

Customer No.: 46718

Confirmation No. 3006

Examiner: Cary E. O'Connor

Technology Center/Art Unit: 3732

**INFORMATION DISCLOSURE  
STATEMENT PURSUANT  
TO MPEP §2001.06(c)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants wish to make the following documents of record in the above-referenced patent application. A copy of each of these documents accompanies this Statement as an Exhibit.

1. A Declaration of Dr. Richard Ridgley concerning his uncorroborated use of retainers for moving teeth. Dr. Ridgley has given testimony under seal in ORMCO CORPORATION v. ALIGN TECHNOLOGY, INC., United States District Court, Central District of California, Southern Division, Case No. SACV.

Align Technology is the assignee of the above-referenced patent application.

**(Exhibit A)**

2. A transcript of the deposition of Lloyd Truax, D.D.S., in the Ormco v. Align Technology litigation, concerning his work in using retainers for moving teeth.

**(Exhibit B)**

3. A transcript of the deposition of Kevin Truax in the Ormco v. Align Technology litigation concerning work he did with Lloyd Truax. **(Exhibit C)**

4. Documents produced in the Ormco v. Align Technology litigation by Lloyd and Kevin Truax concerning Lloyd Truax's work in using retainers for moving teeth.

**(Exhibit D)**

5. A transcript of the deposition of Michael David Rains, D.D.S., in the Ormco v. Align Technology litigation concerning his work in using retainers for moving teeth. **(Exhibit E)**

6. A transcript of the deposition of Guadalupe Nieto in the Ormco v. Align Technology litigation concerning work she did with Michael David Rains.

**(Exhibit F)**

7. Documents produced in the Ormco v. Align Technology litigation by Michael David Rains concerning his work in using retainers for moving teeth.

**(Exhibit G)**

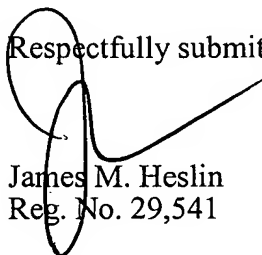
8. An Order from the Ormco v. Align Technology litigation finding that claims 1-3 and 11-13 of U.S. Patent 6,398,548 and claims 1-3 and 7-8 of U.S. Patent No. 6,554,611, are invalid. **(Exhibit H)**

9. U.S. 6,398,548 **(Exhibit I)**

10. U.S. 6,554,611 **(Exhibit J)**

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

  
James M. Heslin  
Reg. No. 29,541

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Attachments: *Exhibits A-J*  
JMH:jke  
60476476 v1

PTO/SB/21 (09-04) 1fw

<b>TRANSMITTAL FORM</b>  <small>(to be used for all correspondence after initial filing)</small>	Application Number	10/632,482
	Filing Date	August 1, 2003
	First Named Inventor	PHAN, LOC X.
	Art Unit	3732
	Examiner Name	O'CONNOR, CARY E
	Attorney Docket Number	018563-001130US
Total Number of Pages in This Submission		

<b>ENCLOSURES</b> (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement	<input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard PTO/SB/08A & PTO/SB/08B 119 Reference Copies IDS Pursuant to MPEP § 2001.06 (c) Exhibit Binder (A-J)
<input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<div style="border: 1px solid black; padding: 2px;"><b>Remarks</b> The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.</div>	

<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>			
Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	James M. Heslin		
Date	April 25, 2005	Reg. No.	29,541

<b>CERTIFICATE OF TRANSMISSION/MAILING</b>			
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Signature			
Typed or printed name	Tiffany Wu	Date	April 27, 2005

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Examiner: O'CONNOR, CARY E

Art Unit: 3732

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

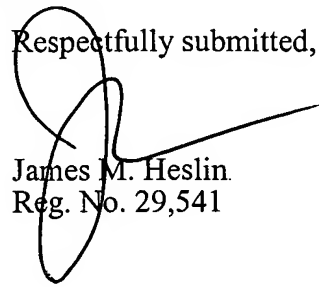


representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



James M. Heslin  
Reg. No. 29,541

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JMH:tfw  
60469847 v1



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
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		Filing Date	August 1, 2003		
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		Art Unit	3732		
		Examiner Name	O'CONNOR, CARY E		
Sheet	1	of	9	Attorney Docket Number	018563-001130US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	1	EP	0091876	A1	10-19-1983	Duret		<input checked="" type="checkbox"/>
	2	EP	0299490	A2	01-18-1989	Steinbichler et al.		<input checked="" type="checkbox"/>
	3	EP	0376873	A2	07-04-1990	Shafir		<input type="checkbox"/>
	4	EP	0490848	A2	06-17-1992	Nobelpharma AB.		<input type="checkbox"/>
	5	EP	0541500	A1	06-12-1998	Nobelpharma AB		<input type="checkbox"/>
	6	EP	0731673	B1	09-18-1998	Andersson et al.		<input type="checkbox"/>
	7	EP	0774933	B1	05-28-1997	Oden et al.		<input type="checkbox"/>
	8	FR	2652256	A1	03-29-1991	Jourda		<input checked="" type="checkbox"/>
	9	FR	2369828	A1	06-02-1978	Suyehiro		<input checked="" type="checkbox"/>
	10	WO	90/08512	A1	08-09-1990	Dolphin Imaging Systems		<input type="checkbox"/>
	11	WO	91/04713	A1	04-18-1991	Jourda et al.		<input type="checkbox"/>
	12	WO	94/10935	A1	05-26-1994	Ormco Corporation		<input type="checkbox"/>
	13	WO	98/44865	A1	10-15-1998	Nobel Biocare		<input type="checkbox"/>
	14	WO	98/58596	A1	12-30-1998	Align Technology		<input type="checkbox"/>

Examiner Signature		Date Considered	
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60469847 v1

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
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				Filing Date	August 1, 2003
				First Named Inventor	PHAN, LOC X.
				Art Unit	3732
				Examiner Name	O'CONNOR, CARY E
Sheet	2	of	9	Attorney Docket Number	018563-001130US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	15	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.	
	16	ALTSCHULER et al., "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," SPIE Imaging Applications for Automated Industrial Inspection and Assembly, vol. 182 (1979), p. 187-191.	
	17	ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures," IADR Abstracts, Program and Abstracts of Papers, 57th General Session, IADR Annual Session, March 29, 1979 - April 1, 1979, New Orleans Marriot, Journal of Dental Research, Vol. 58, January, 1979, Special Issue A, p. 221.	
	18	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," Optical Engineering, Vol. 20(6) (1981), pp. 953-961.	
	19	ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607, 1980, 1 page total..	
	20	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	21	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," Acta Odontologica Scandinavica, vol. 47 (1989), pp. 279-286.	
	22	BAUMRIND et al., "A Stereophotogrammetric System for the Detection of Prosthesis Loosening in Total Hip Arthroplasty", NATO Symposium on Applications of Human Biostereometrics, July 9-13, 1978," SPIE Vol. 166, pp. 112-123.	
	23	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, California Dental Association, Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.	
	24	BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. pp.142-166.	
	25	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," Seminars in Orthodontics, Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	
	26	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," The Angle Orthodontist, Vol. 51 No. 3 (July 1981), pp. 253-259.	
	27	BERNARD et al., "Computerized Diagnosis in Orthodontics for Epidemiological Studies: A Progress Report", Abstracts of Papers, Journal of Dental Research, Vol. 67, Special Issue March 9-13, 1988, p.169.	
	28	BHATIA et al., "A Computer-Aided Design for Orthognathic Surgery," British Journal of Oral and Maxillofacial Surgery, Vol. 22 (1984), pp. 237-253.	

Examiner Signature		Date Considered	
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	29	BIGGERSTAFF et al., "Computerized Analysis of Occlusion In The Postcanine Dentition," <i>American Journal of Orthodontics</i> , Vol. 61, No. 3 (Mar. 1972), pp. 245-254.		
	30	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," <i>The Angle Orthodontist</i> , Vol. 40, No. 1 (Jan. 1970), pp. 28-36.		
	31	BOYD et al., "Three Dimensional Diagnosis and Orthodontic Treatment of Complex Malocclusions With the Invisalign Appliance," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), p. 274-293.		
	32	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," <i>Journal of Dental Research</i> , Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, p. 208		
	33	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter," <i>J Dent Res.</i> , Vol. 65, No. 3, March 1986, pp. 428-431.		
	34	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts 1 and 2)," <i>Journal of Clinical Orthodontics</i> , (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.		
	35	BURSTONE et al., "Precision Adjustment of the Transpalatal Lingual Arch: Computer Arch Form Predetermination," <i>Am. Journal of Orthodontics</i> , Vol. 79, No. 2 (Feb. 1981), pp. 115-133.		
	36	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," <i>JCO</i> (June 1990), pp. 360-367.		
	37	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," <i>Clinical Orthopaedics and Related Research</i> , No. 201 (December 1985), pp. 60-67.		
	38	CHIAPPONE, "Constructing the Gnathologic Setup And Positioner" <i>J. Clin. Orthod.</i> , 14:121-133, 1980.		
	39	COTTINGHAM, "Gnathologic Clear Plastic Positioner" <i>Am. J. Orthod.</i> , Vol. 55, No. 1, (January 1969), pp. 23-31.		
	40	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairsides," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites" The Computer Moves From The Front Desk To The Operatory, <i>Canadian Dental Journal</i> , vol. 54(9), , (1988), pp. 661-666.		
	41	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" <i>Canadian Dental Journal</i> , Vol. 57, No. 2 (Feb. 1991), pp. 121-123.		
	42	CROOKS, "CAD/CAM Comes to USC," <i>USC Dentistry</i> , (Spring 1990) pp. 14-17.		

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	43	CURETON, "Correcting Malaligned Mandibular Incisors With Removable Retainers" <i>J. Clin. Orthod.</i> , 30:390-395, 1996.	
	44	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," <i>Seminars in Orthodontics</i> , Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	45	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," <i>Plastic and Reconstructive Surgery</i> , Vol. 77, No. 6 (June 1986), pp. 877-885.	
	46	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" <i>DSC Production AG</i> , Jan. 1992, pp. 1-7.	
	47	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," <i>J. Biomechanics</i> , Vol. 9 (1976), pp. 793-801.	
	48	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 2 pages total.	
	49	DenTrac Corporation, Dentrac document, pp. 4-13.	
	50	DURET et al., "CAD-CAM in Dentistry," <i>Journal of the American Dental Association</i> , Vol. 117 (Nov. 1988), pp. 715-720.	
	51	DURET et al., "CAD/CAM Imaging in Dentistry," <i>Current Opinion in Dentistry</i> , Vol. 1 (1991), pp. 150-154.	
	52	DURET, "Vers une prothese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.	
	53	DURET, "The Dental CAD/CAM, General Description of the Project," <i>Hennson International Product Brochure</i> , Jan. 1986., 18 pages total.	
	54	ECONOMIDES, "The Microcomputer in the Orthodontic Office," <i>JCO</i> , (Nov. 1979), pp. 767-772.	
	55	ELSASSER, "Some Observations on the History and Uses of the Kesling Positioner" <i>Am. J. Orthod.</i> , Vol. 36, No. 5, (May 1950) pp. 368-374.	
	56	FABER et al., "Computerized interactive orthodontic treatment planning," <i>Am. J. Orthod.</i> , Vol. 73, No. 1 (Jan. 1978), pp. 36-46.	
	57	FELTON et al. "A computerized analysis of the shape and stability of mandibular arch form," <i>Am. Journal of Orthodontics and Dentofacial Orthopedics</i> , Vol. 92, No. 6 (Dec. 1987), pp. 478-483.	
	58	FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery," "Abstract of Papers, <i>Journal of Dental Research</i> , Vol. 70 (1987), pp. 754-760.	

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	59	GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 2 pages total.	
	60	GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxillofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, <i>Journal of Oral and Maxillofacial Surgery</i> , Vol. 48, no. 8, Supp. 1, August 1990, p. 5-6.	
	61	GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery," <i>JCO</i> , (April, 1989), pp. 262-28.	
	62	HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Caries," Abstracts of Papers, <i>Journal of Dental Research</i> , Vol. 70, April 17-21, 1991, p. 528.	
	63	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), <i>Informationen</i> , (March 1991), pp. 375-396.	
	64	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," <i>AAOMS</i> 1999, p. 96.	
	65	JCO Interviews, "Craig Andreiko, DDS, MS on the Elan and Orthos Systems", <i>JCO</i> , (Aug. 1994), pp. 459-468.	
	66	JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," <i>JCO</i> , (Dec. 1983), pp. 819-831.	
	67	JERROLD, "The Problem, Electronic Data Transmission and the Law," <i>AJO-DO</i> , (Apr. 1988), pp. 478-479.	
	68	JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," <i>British Journal of Orthodontics</i> , Vol. 16 (1989), pp. 85-93.	
	69	KAMADA et al., "Case Reports on Tooth Positioners Using LTV Vinyl Silicone Rubber" <i>J. Nihon University School of Dentistry</i> , 26(1):11-29, 1984.	
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		Art Unit	3732		
		Examiner Name	O'CONNOR, CARY E		
Sheet	6	of	9	Attorney Docket Number	018563-001130US

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